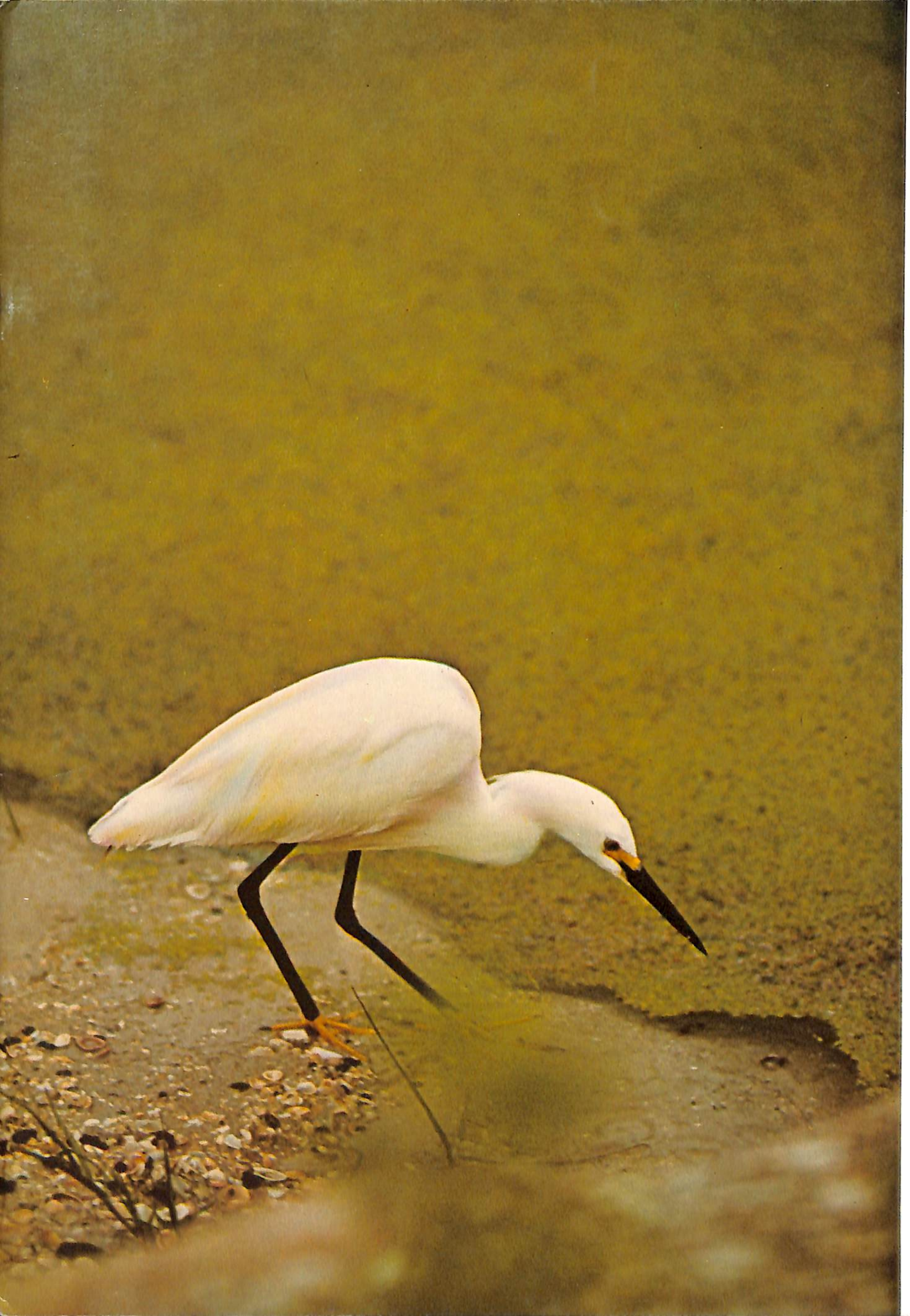
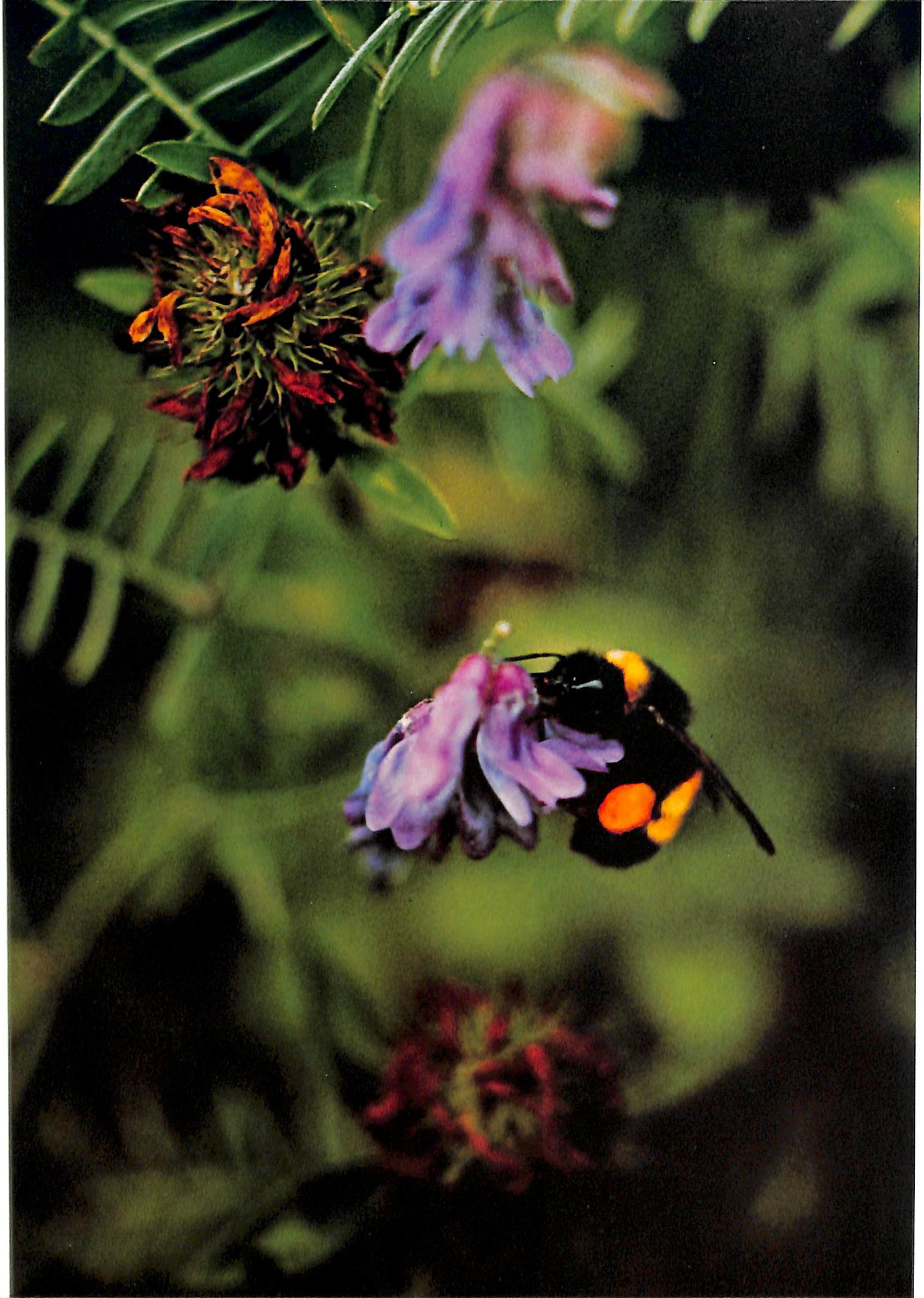
LEICA
PHOTOGRAPHY





LEICA PHOTOGRAPHY

Volume 26 Number 1 1973

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on Florida's West coast.

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A zealous bee, a spring-hued palette,
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The editors are happy to consider original articles on photography with the Leica and photographs taken with Leica cameras and lenses. All manuscripts and photographs should be accompanied by stamped, self-addressed return labels.

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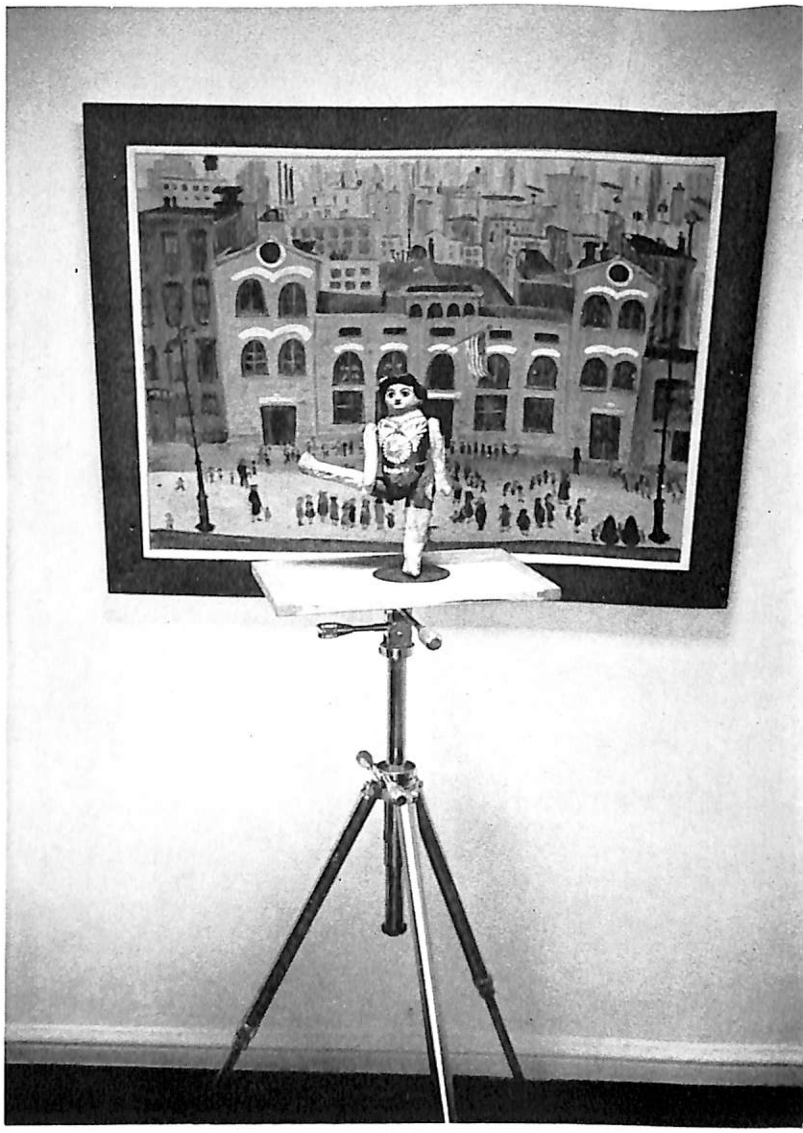
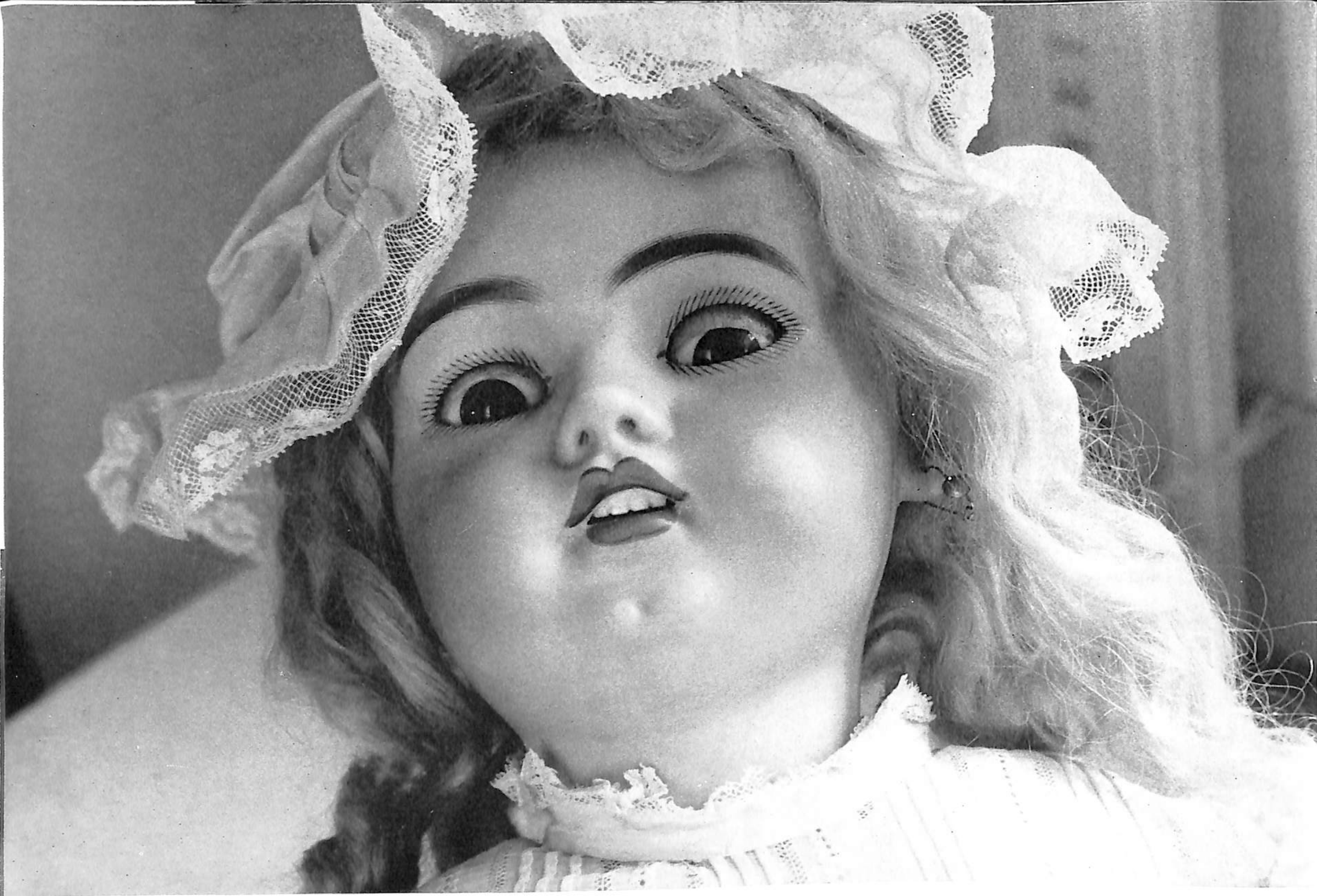
THE DOLL

A New Book Photographed by H. Landshoff

With their arched eyebrows or pensive smiles, serene, or innocent or wordly-wise, the dolls so knowingly photographed by H. Landshoff in the splendid new book "The Doll" (Abrams) seem to gaze out at you with almost human expressions. And, says Landshoff, he chose them from among many precisely for these life-like looks. "One of the oldest of human institutions", these mirror-images of ourselves were found by Landshoff and the book's author, Carl Fox, mostly in private collections in the eastern U.S., and photographed in their own surroundings. Japanese, African, carved-wood Brazilian, rag doll, voodoo doll, Hopi kachina, French and German bisque with blue, glass eyes, or even paper cut-out, the dolls were selected from among the finest examples of their kind.



Landshoff's equipment was simple and so was his method. Most of the black-and-white photographs in the book are hand-held, available light shots. Once or twice, for a close-up in very poor light, he used a soft 'sun gun' against a wall. He always thought of his subjects as real people, he says, and would photograph them accordingly, choosing the proper angle, the correct framing for their own particular personalities. He had a small platform made according to his own specifications which could be screwed on top of a tripod and moved up and down, from side to side, and tilted. The doll could be attached to the top of the platform, and it was especially useful for positioning it in front of a specific background.

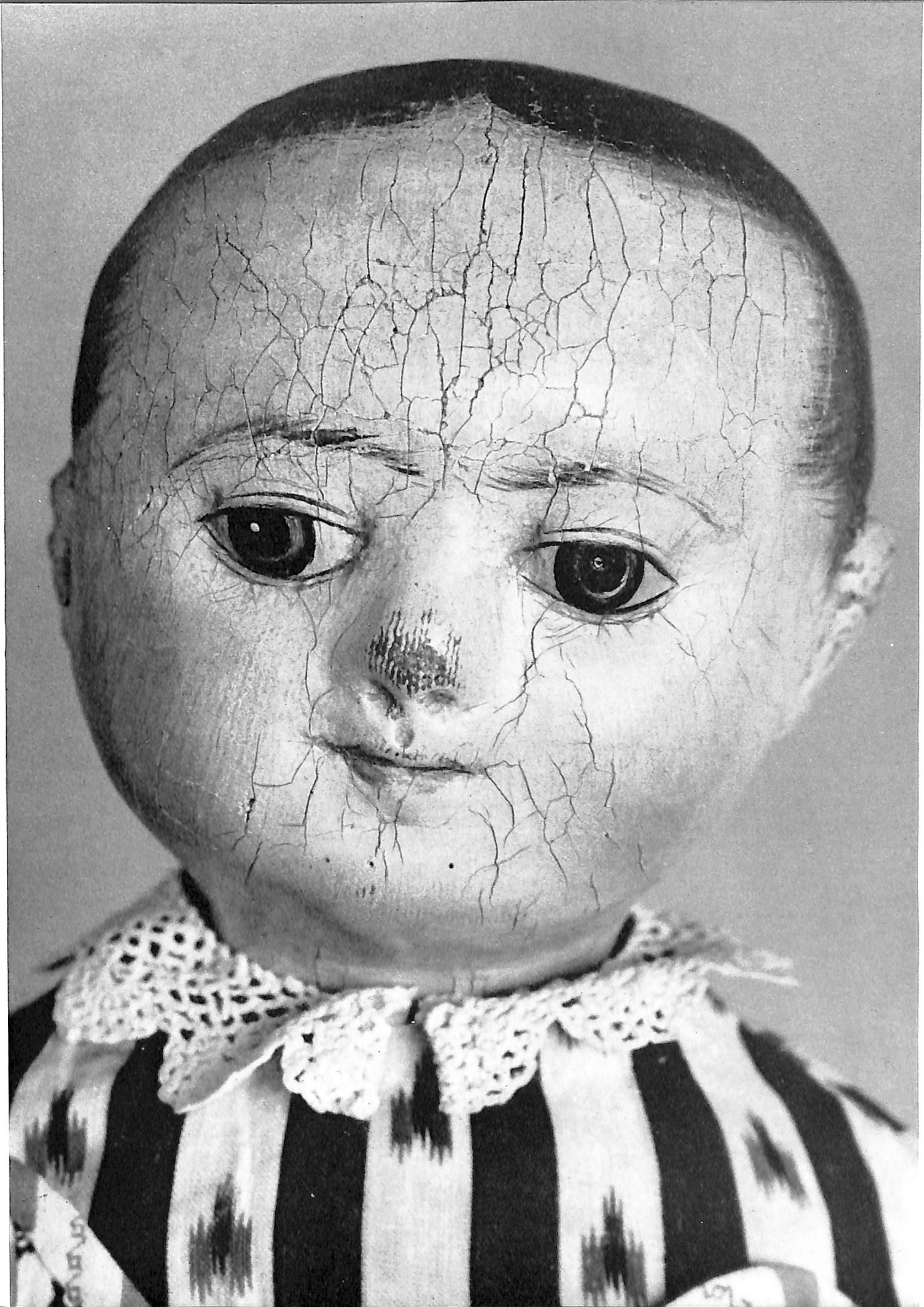


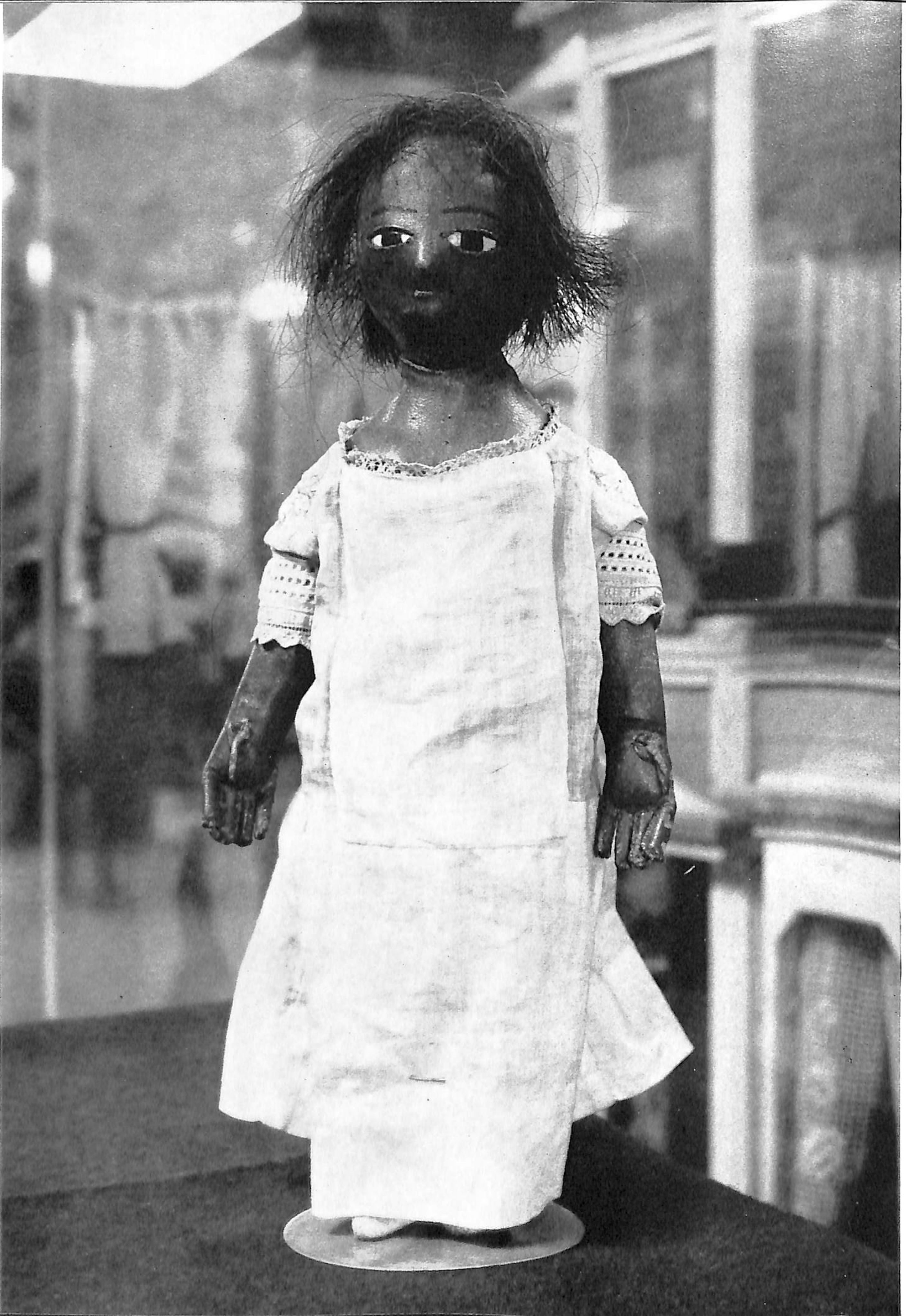
Long known as one of the most meticulous of photographers, Landshoff has some recommendations regarding exposure for those who would like to follow suit in their own homes. Take a gray-card reading, he says, and always bracket your exposures. (Gray cards for the purpose are available from your photo dealer.) Establish an opening, and then change the shutter speed one and two clicks slower, then one and two clicks faster than the meter recommends. Make five different exposures in all.

But, if in doubt, he suggests making even more exposures, up to seven or eight varying ones. In this way one would always be sure of at least one *perfect* exposure. Landshoff made all the black-and-white prints for the book in his own darkroom.

Landshoff started his professional career as a caricaturist in Munich. *LIFE* photographer Fritz Goro, then an editor of the well-known German picture magazine, "Muenchner Illustrierte", got him started in photography in 1929. His first camera was a Leica with a 50mm *f*/3.5 Elmar lens, borrowed from the publisher of the magazine. He is best known in this country for his fashion photography, his superlative industrial work and annual report photos. He did the photography for the book, "The Shell" (Abrams) which appeared two years ago.

The photographs on these pages were taken with a Leica and Visoflex housing with the 65mm Elmar and 90mm Summicron lenses. Landshoff adds that had he owned a Leicaflex, he would, of course, have used that camera with the new 60mm Macro-Elmarit too!

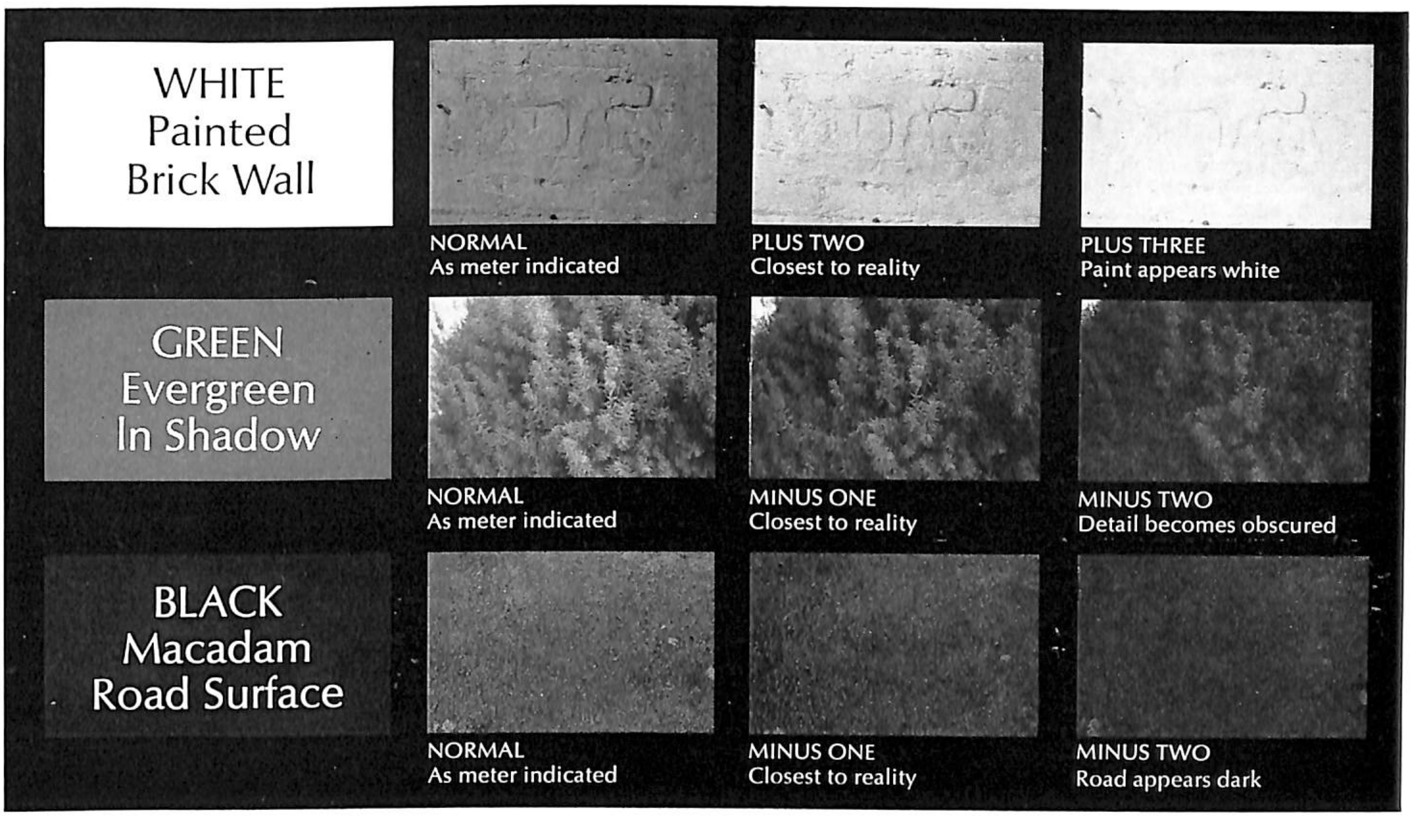




EXPOSURE through the lens GRAY-LY

Peter Moore

There is no "fool-proof" camera/meter system



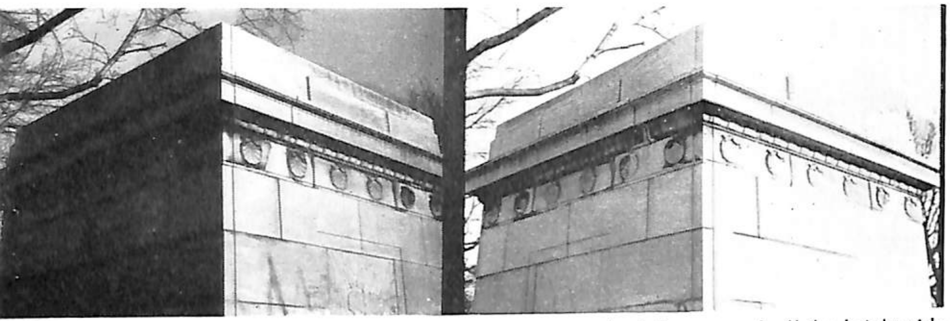
We have heard that, in Daguerrean days, one could lift a dark flap at the side of one's camera and peer inside at the film to see how it was doing. An exposure of a half an hour seemed to suffice on a clear day—on an unclear day you could expose forever.

As leisurely as this prospect may seem, those days are gone forever. Now 1/2000 of a second seems to be necessary with fast films in bright sunlight for use of a fast lens' most critical apertures. And this implies a film speed gain of about 4 *million* times.

Happily for us, camera and exposure meter design have come a long way too. Today's cameras seem to operate routinely in conditions beyond the dreamings of early photographers.

The introduction of the cadmium sulphide photoresistor in the '60s has revolutionized camera and meter design within recent memory. The older photovoltaic circuitry had such limited sensitivity that it could hardly keep up with the picture-making potentials of the Super XX period, even with large, hand-held meters. And the introduction in 1954 of Tri-X made the limitations of selenium-celled meters even more obvious. One could now make pictures under light conditions that were now impossible to meter.

Development of the CdS cell came about as a result of basic transistor research. These new cells monitored current flow in relation to light rather than having to generate it. This led to compact light-measuring systems of unprecedented sensitivity. Continuing sophistication of CdS metering circuitry has led to the



The photo of the monument on the left was read off the bright side and the photo on the right from the shadow side.

through-the-lens metering cameras of today, of which the Leicaflex and the new M5 are, perhaps, the most sophisticated examples.

The new Leicas contain light meters of great precision that provide selective metering. Even with a normal lens, we can take selective "close-up" readings of the important areas of our would-be picture and emphasize them accordingly. Of equal importance is the convenience and speed of their use. Since the meter is built-in and directly coupled to the camera controls, we no longer have to read our meter first—this is done simultaneously as we set the exposure indicated. The resulting gain in speed and convenience is astonishing. Thus we can save space, weight and time, compensate automatically for bellows extensions and most filters, remember unfailingly the speed of the film in the camera, and save miles of walking up to the subject for a reading and back to the shooting position, only to find that the picture is not there anymore.

In spite of all this, however, we do not have a "foolproof" camera/meter system. If you are critical about your results, you will want to know what you are metering and what your metering system is "thinking" so that you can get the precise results your camera is capable of.

Through-the-lens metering systems are highly-refined, reflected-light meters. And, as such, are subject to the same strengths and limitations as any hand-held reflected-light meter. Since such meters read light reflected *from* the subject, they are automatically and irrevocably dependent on the tone of the subject. Most reflected light meters are designed to produce correct exposure when reading "average" outdoor subjects which has been found to reflect 18% of the light falling on it and to approximate 18% gray.

Consequently, a meter must "assume" that anything it is pointed at is "average" and, acting accordingly, reproduce it as "average" or 18% gray. Without understanding these limitations and making some compensation for it, you will come up with 18% gray snow and beach scenes, and 18% gray black cats in 18% gray coal bins.

There are two methods of using a reflected-light metering camera with discrimination. The first involves finding the "average" toned part of the subject and basing your reading on that. This is fast, relatively easy, and can be done almost instinctively as you compose and focus a shot. The second system is needed when there is *no* readable middle tone and calls for a deliberate variation based on the tone available for reading.

In either case, the precise and selective metering systems of the M5 and Leicaflex help you to do this more easily and accurately than any other kind of reflected light meter. *You* stay put—*they* reach out to the subject for a precisely defined close-up reading.

Finding the average is easy—if you know what to look for. The tint block, with the title of this article is a good approximation of an 18% gray. Study it for a long time until it soaks in. Better yet, buy a packet of Kodak Neutral Test Cards and put them into scenes. Meter the card, then meter the scene. Try to anticipate what parts of the scene are doing to match the card. Read grassy areas, trees, etc. Avoid reading bright light sources in the picture area, brilliant highlights reflected on metal, water, other shiny surfaces. A quick check on your aiming point—read (align your pointer), then place the reading area on the darker and lighter parts of the subject. If the needle moves *equally* above and below the pointer position you're home free.

If no "average" tone is present you must ride with the blow a bit; remember that your meter is seeing "gray" and you can avoid seeing red. Reading that snow scene, you must realize that your meter wants to make it gray, while *you* want it white. So, you must give *more* exposure in the camera to make it whiter on the print or transparency. Your black cat will come out gray unless you give it *less* exposure than indicated. Exactly how much change is necessary will depend mainly on the subject tone involved.

Subject	Reflectance	Exposure Correction
Fresh snow, cloud highlights	100%	2½ stops more
Clean white paint	80%	2 stops more
Weathered white paint	65%	1½ stops more
Facial highlights	30%	1 stop more
Darker flesh tones	20%	normal
Gray card	18%	normal
Gray flannel (medium)	9%	1 stop less
Gray flannel (dark)	4.5%	2 stops less
Blue serge	2.2%	3 stops less
Black velvet	1.1%	4 stops less

Note that these values are meant to be illustrative, not exact prescriptions. They are accurate enough for photographic purposes but were not obtained photometrically and would vary from sample to sample anyway. Note particularly that normal caucasian tones are *not* average 18% gray subjects. If you base your reading on a sunlit flesh tone, you will find your exposure about a stop under. So, either open up a stop or read a facial shadow instead. The deviations for lighter tones should not be noted especially if copying is to be done.

If this seems too formidable or theoretical, your camera will teach you all you need to know if you make a few experiments. Bracketing is not a disgrace —it should be a way of life. When you encounter any sort of unusual subject or condition, *first* take a shot as indicated by the meter, then bracket by increasing exposure for light subjects and decreasing exposure for dark subjects. A few exposures at ½ or 1 stop intervals and you'll have a film-test strip. Examining your results, you can see the type and degree of error in the uncompensated reading and the amount of correction needed. If you *always make an uncorrected exposure first,* this little experiment will soon guide you to fast and accurate useage. As a bonus, you have an extra negative or two if one should become damaged and you might even end up liking an unusually dark or light effect.

Here are some practical notes: carry a spare battery on extended trips or if your battery is nearing its first birthday. As a matter of fact, it might be a good practice to change your battery at regular yearly intervals (New Years, your anniversary, your camera's birthday??).

When you shoot in color, study your bracketed tests by projecting them under the conditions that will exist when you show your slides. Color has a shorter tonal scale than black and white so the corrections noted in the subject reflectance table may need to be modified by your experience and preferences.

In copying, particularly of white subjects, you can either read your gray card directly, or read the white area and compensate. An exposure test series will give you the *exact* compensation for your film, equipment and viewing conditions and is the most accurate method by far.

In theatrical work you must find an average area or compensate, depending on the situation. When possible, use a lens long enough to fill your reading area with the selected tone and then compensate if needed. If the subject is spotlit and still too far away, try to place it in the reading area so that the illuminated performer fills half the area, and the black background fills the balance. Equal areas of black and white will approximate a middle tone. If it's too dark to get a good reading, read the brightest area around and then compensate. And use a tripod if needed.

Camera meters (particularly the incredibly sensitive M5 system) are beginning to approach the sensitivity of the best handheld meters and should certainly see you through any situation where you can work without a tripod. I carry a small penlight flashlight to illuminate my meter scales when the going gets really tough.

If you're quantitatively minded, you can read the brightness range of very long scale subjects and predict your results in terms of the final print. Holding your *f*/stop constant, read highlights and shadows by varying shutter speed only. The ratio between highlight and shadow speeds is the brightness range. If your sky takes 1/1000th and your shadows 1/30th, your range is about 300 to 1. Black-and-white prints can handle about 100 to 1, so you will have to sacrifice either clouds or shadows. The choice is yours—favor your exposure to feature the sky or the shadows. Forewarned is forearmed. Color films have a tolerance of about 4 to 1 for intense color rendering and maybe 8 to 1 for pastels to intense colors.

Remember—think gray and bracket a little if in doubt.

FOCUSING ON

Color Slide Courses

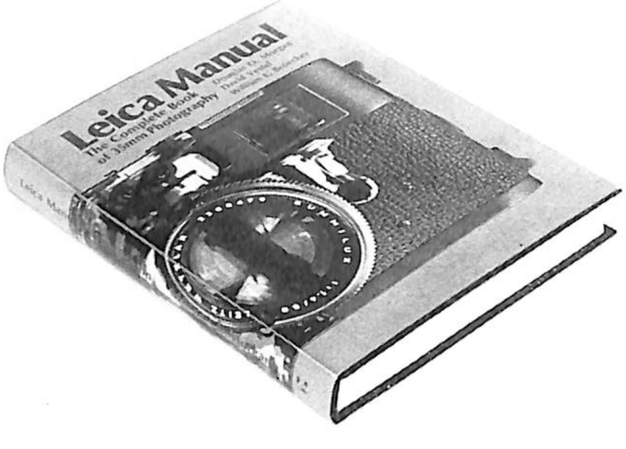
Helen C. Manzer's color-slide courses this summer and fall will again be held on California's Monterey Peninsula and at Weirs Beach in the famous lakes region of New Hampshire. The noted photographer, teacher and lecturer will offer four West Coast courses as follows: The first group from May 20 to June 1; the second group from June 10 to June 22; the third group from June 24 to July 7; the fourth group from July 8 to July 20. Further information about these courses is available from Mr. Thomas J. Hardy, 771 Toyon Drive, Monterey, California 93940.

Two East Coast courses will be held from July 29 to August 10, and from August 12 to August 24. There will also be two special fall courses from September 23 to September 28, and from September 30 to October 5. These will feature the extraordinary fall foliage coloring of the region. For more information on the New Hampshire courses write to Mrs. Ruth L. Wiesen, P.O. Box 558, Newport, Vermont 05855.

Minolta Agreement

Most owners of Leitz photo equipment are by now aware of the agreement for technical cooperation announced recently by Leitz/Wetzlar and Japan's Minolta Camera Company. It will involve the sharing of know-how, patents, a joint utilization of production facilities as well as an exchange of technicians. The two firms have been involved in camera production for many years, Leitz since 1925, Minolta since 1928, and the association is expected to be a propitious one, enhancing their already high technical standards.

Officials of Minolta at a party in their honor in Wetzlar last October.


Leica Manual
The Complete Book of 35mm Photography

New Leica Manual

A brand new edition of what is often referred to as the "bible of 35mm photography" came sliding off the presses in March. The 15th edition of the Leica Manual, the first in more than ten years, is chock-full of the latest data on the Leica and Leicaflex systems of photography, and is also a valuable guide and reference work on photographic theory and practice. Included in its 33 chapters of entirely new material are articles covering a wide range of specialized information such as exposure, processing, optics, emulsions, and shooting techniques from portraiture to photojournalism and macro to telephoto. It covers all previous models of Leica cameras and has chapters also on Leica history and Leica lore. Contributors include such experts as Norman Goldberg, Arthur Goldsmith, Bill Pierce, Theo Kisselbach, Ansel Adams, Beaumont Newhall and many others.

A new feature of this edition is the picture section. It contains the work of such pioneer Leica-users as Oscar Barnack and Paul Wolff and contemporary photographers such as Henri Cartier-Bresson and Elliott Erwitt. A special color section includes many photographs by Ernst Haas.

This edition of the Leica Manual is edited by Douglas O. Morgan, David Vestal, and William L. Broecker. It is available at photo dealers, bookstores, and directly from the publishers: Morgan & Morgan, Inc. The price is $20. An accompanying Leica Looseleaf will be available during the summer.

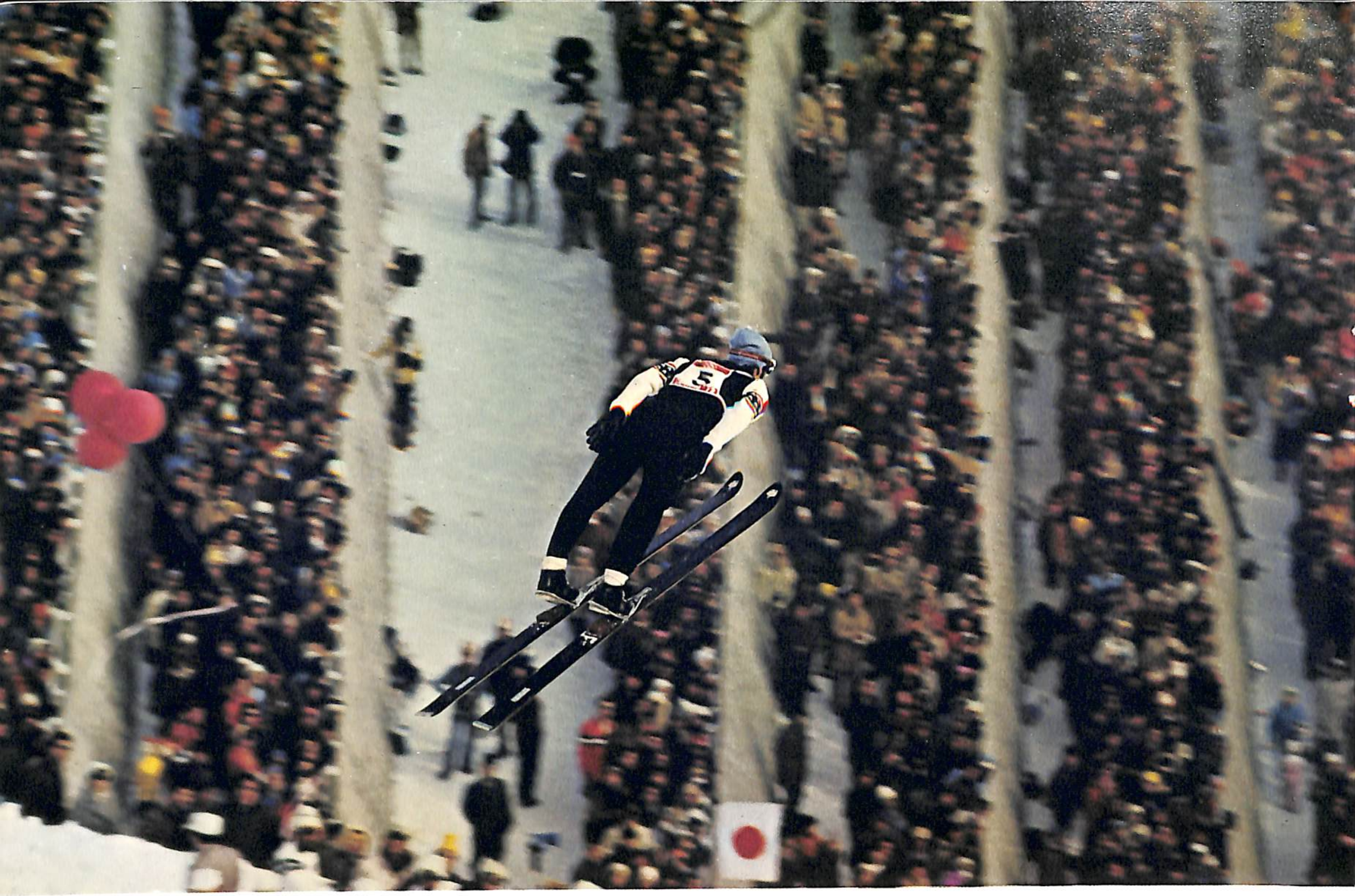
Skiing With the Leicaflex

Fletcher Manley

Mountains, snow, fresh, crisp air and the pull of gravity are the elements of skiing. These are constant factors that we must meet on nature's terms. Add healthy bodies and a dancer's grace and you have recreation imbued with an aesthetic rarely equalled in other sports.

And it is this aesthetic, this fluidity of form that I am drawn to in my attempt to photograph ski recreation.

I have found the Leicaflex SL MOT and Kodachrome II film an unbeatable combination to cope with the conditions peculiar to ski photography. Winter weather is frequently both cold and stormy. This can affect camera performance as well as apparent image sharpness. What's more, even on bright sunny



days, a snowscape reflects a "blueness" (reflected skylight and ultraviolet) that is evident on film if not to the eye. And skiing, by its very definition, involves motion and speed.

Although Kodachrome II is the finest-grained 35mm color film available, for every gain in photography there is a loss. With Kodachrome II it is the ASA speed of only 25. This is especially felt where ski action is involved, since fast shutter speeds are required.

However, the extremely bright focusing screen of the Leicaflex SL makes viewing and focusing simple, even on dark days. And the advantages of Kodachrome II overbalance its slowness—especially since the fast sharp-to-the-edges Leicaflex lenses permit high shutter speeds. The brightness of the Leicaflex SL permits precise focusing, even follow-focusing, at the larger aperture openings required of Kodachrome II. Because of the minimal depth-of-field problems at large apertures, this ease of focus is of critical importance when shooting with telephoto lenses.

My "standard" exposure for Kodachrome II on a bright sunny day in the mountains is at 1/250th of a second between f/5.6 and f/8. However, when shooting sports events you have to take what the weather dishes out, and it is frequently less than optimum. At the Olympic Games in Japan last winter, where bad weather was standard, I was often forced to shoot at 1/250th at f/4. Yet I found no difficulty in keeping fast moving ski racers and ski jumpers in sharp focus with the 250mm lens.

Shooting a moving skier for optimum results requires fast reflexes in addition to a knowledge of the sport. In the case of a racer, I usually follow the skier through his run until he reaches the point I have prefocused on. Then I shoot. The trick, of course, is to get the peak of action and at the same time try to say something about the nature of the sport—speed,

dynamics, danger, beauty, etc. For this the four frames-per-second exposure rate possible with the Leicaflex SL MOT and motor drive are an invaluable aid.

Sometimes I will follow-focus with a skier as he makes his run (in deep powder, for example) and shoot at the peak moments when everything "comes together." Again, the bright focusing screen and the fast firing potential of the Leicaflex SL MOT and motor assembly greatly facilitate this.

One of the problems with motorized cameras in cold weather is the rapid drain on battery life. So, the quick-change feature of the Leicaflex SL MOT battery pack is a big plus for ski photographers. About the size of a cigarette pack, the batteries can be kept in a warm pocket when not in use. When ready for action, the battery pack is quickly slipped into place without fuss. I have experienced no problem with battery drag in cold weather using this technique. In addition, the nickel-cadmium battery pack is recharged to full strength in only four hours.

I select lenses according to how close I can get to the action as well as the perspective I wish to create. At races, where positioning is often restricted, I find the 90mm, 180mm, and 250mm lenses most useful.

When shooting recreational skiers, however, I am able to exercise more control over the desired perspective. And as I am intrigued with the close-up wide angle perspective of ski action I tend to wider angle lenses. The 45-to-90mm Angenieux Zoom lens has been most effective as my general-purpose ski recreation lens.

What's more, a pleasing discovery has been the adaptation of my motor-driven M2 into a unique "ski camera." With a 21mm or a 35mm lens attached I am able to ski beside my subject, fire the camera at will with one hand, and still see where I am going. This requires a bit of dexterity, to be sure, but the results can be worthwhile.

For example, at Vail, Colo., I recently photographed a girl skier with long, blond hair. I wanted to suggest a feeling of speed and fluidity. So I told her to ski close beside me and make many short turns. Shooting with my motorized M2 "ski camera" at 1/15, 1/30, and 1/60th of a second, and moving with the subject, I kept her in relative sharpness and yet rendered the snow, background, and her flying hair as blurred action.

Not the least of the rewards of ski photography is that it's good for you!

Capturing the Coyote with a New Leitz Lens

The 800 mm Telyt-S

Stan Wayman

Stan Wayman was a LIFE staff photographer for many years and had recently been free-lancing. He died suddenly on March 10th in Washington, D.C., where he lived. ed.

The coyote was first identified as a species in 1823 in Nebraska, and the first bounty on his life was posted two years later. Since then, thousands have been shot, poisoned, and trapped, seemingly with every weapon but napalm. And they have managed not only to survive, but to multiply. One of the reasons they have survived is that they make it a practice to stay out of rifle range and, consequently, out of camera range.

I discovered this the hard way when I spent several days trying to photograph coyotes in Oregon and Texas. Although the animals were plentiful, they carefully stayed out of the range of my longest lens, the 560mm Televit. I needed a longer lens but one that would be light, portable, and easy to focus. It also had to focus in close. There would be no time to change lenses in the cramped front seat of my jeep if the animals came in close.

While I was preparing for another try at the

National Elk Refuge in Jackson Hole, Wyoming, I was able to borrow a prototype of the Leitz 800mm Telyt. It fitted my requirements and then some. My first tests proved the lens to be needle-sharp at its widest aperture of f/6.3. What's more, it focused down to an amazing (for a lens this long!) 41 feet. It weighed a modest 15 pounds, and disassembled into 3 parts for shipping and backpacking. It also had a sportsfinder which I later found I would use constantly when the coyotes were difficult to see in the sagebrush.

I arrived in Jackson Hole feeling much more confident, and rented a jeep to tour the Elk Refuge. Here in this little valley, thousands of elk come down from the Grand Tetons for the winter and are given supplemental food by the U.S. Fish and Wildlife Service. A number of coyotes follow the elk herd to feed off elk that die of natural causes.

Since hunting is not allowed in the Refuge, the elk and coyote were not as afraid of man as they are in their summer quarters in the Tetons. I soon discovered if I stayed in my jeep and kept it on the roads I could observe the animals from fairly close range—at least within 800mm range. However, if I got out of the jeep the animals would immediately take off. That meant I would not be able to use a tripod easily.

I considered having a tripod head mounted on the window ledge of the jeep, but discarded the idea when I realized I would want to change quickly from both front windows to the back window. In a gift store I found a bean bag shaped like a frog and balanced it on the jeep's window ledge. The 800mm Telyt nestled on the bean bag giving firm enough support to use shutter speeds as low as 1/125th of a second.

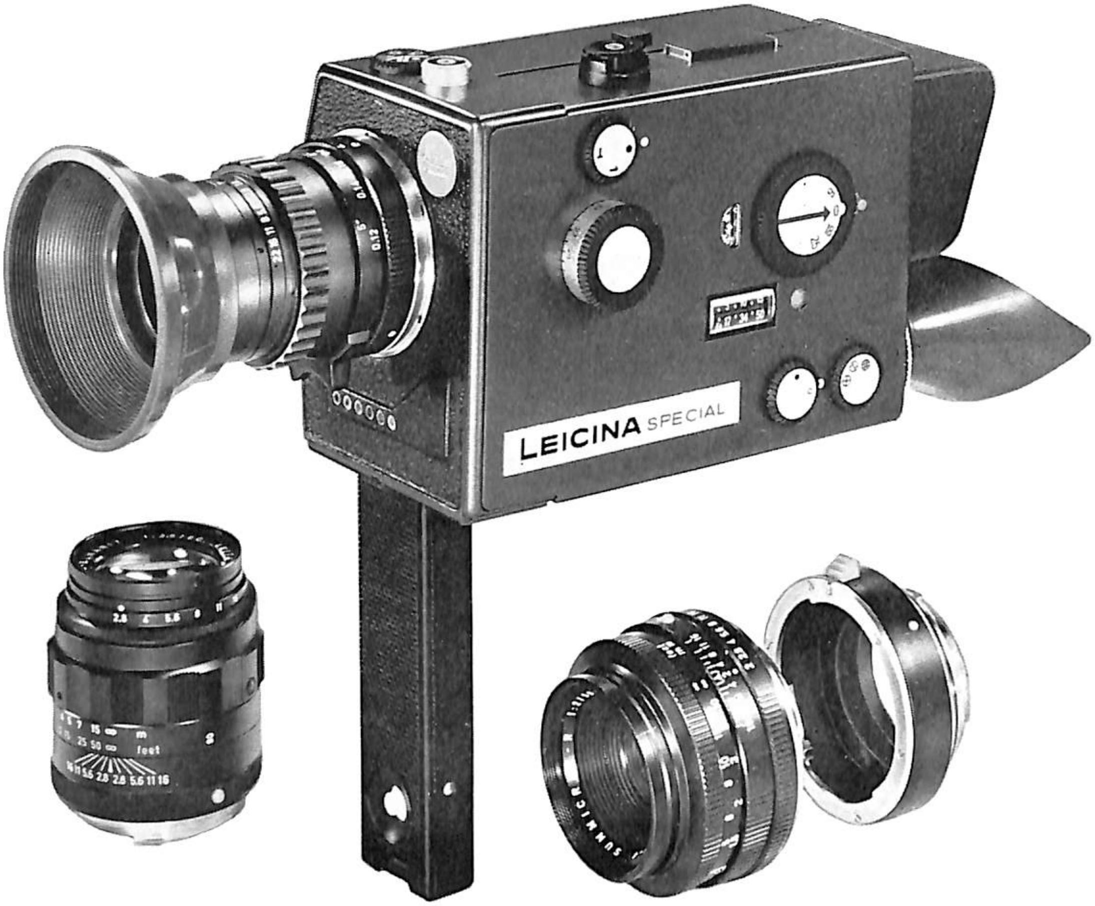
Augmenting the 800mm was my Televit system of the 280, 400, and 560mm lenses, but I soon found myself using the 800mm exclusively. Its ease in focusing enabled me to track the moving animals. The only technical problem I had left was condensation forming on the camera and lens when I closed the windows and started the heater, so I got a plastic garbage bag and let the condensation form on the bag when the equipment was not in use.

The coyote was one of the most elusive animals I have ever photographed and the Leitz 800mm provided the means for recording this much-maligned creature which is frequently heard howling in the night but rarely seen in the beauty and loneliness of its natural surroundings.

LEICINA SPECIAL

Norman Rothschild

Now part of the Leica/Leicaflex System



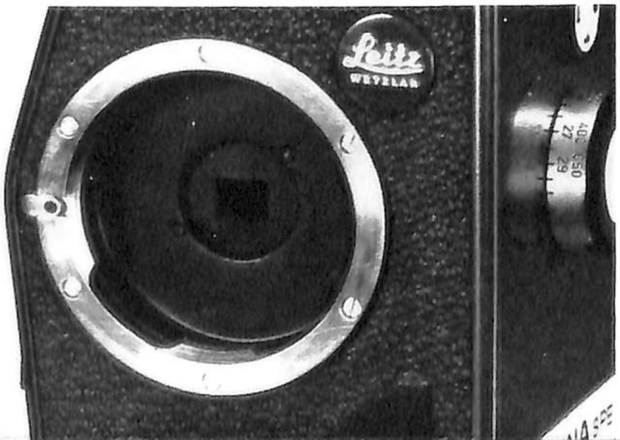
I wonder if its name does full justice to the "Leicina Special," since previous Leicinas have been 'special' in their own precise, high-quality ways. But the Leicina Special has one super-special characteristic—one that will instantly appeal to Leica and Leicaflex users. *It's the first Leicina that is actually an integral part of the Leica and Leicaflex system of photography!*

You can, of course, be a purist and buy the Leicina with a special Leitz cine lens (a 'must' in many cases). Or you can use Leica and Leicaflex lenses on the Leicina Special.

As you may have guessed by now, you can buy the Leicina Special without a lens. Its basic lensmount is identical to that supplied on Leica M cameras. Thus, any lens in a Leica M mount, excepting those shorter than 35mm, can be utilized without adapters. The single-lens-reflex focusing system in the Leicina Special will show you the exact framing, focus and a visual appreciation of depth of field. By means of an adapter, (Cat. No. 22,228) you can also utilize Leicaflex lenses (except for the discontinued 21mm f/3.4-R). And in case some non-Leica/Leicaflex users (such as professional cinematographers who have 16mm Arriflex camera lenses) are eavesdropping, there's an adapter (Cat. No. 22,230) for lenses with 16mm Arri-M-Bayonet mount; there's also an adapter (Cat. No. 22,232) for SLR lenses having an M42x1M thread and an adapter (Cat. No. 22,233) for Minolta SLR lenses.)

If you've got Leica thread-mounted lenses, you can use these on the Leicina Special via adapters (Cat. Nos. 14,097, 14,098 or 14,099, except for the discontinued 21mm f/4 lens, Cat. No. 11,002).

Before discussing special cine lenses offered by Leitz for the Leicina Special, let me tell you of my first experience viewing the image from a 90mm Leica Elmarit f/2.8 on the new camera. Naturally, such a lens has tremendous tele capabilities when used on the Super 8 format. For example, when the lens was set at its closest working distance of 3½ feet, an eye



filled the entire image area! This is the equivalent of having used a lens of 558mm focal length, on the 24x36mm format, a factor of 6.2 times!

But now let's look at two lenses especially designed for use with the Leicina Special. First of these is the 10mm Macro-Cinegon f/1.8. This diminutive optic focuses from infinity to 12cm (5 inches) from film plane. This is close enough to copy a 24x36mm color slide. Its manually operated diaphragm stops down as far as f/22. It may also be closed completely, by turning the diaphragm ring past the f/22 mark. This feature can come in handy for fade-in and fade-out work, or when making lap dissolves. The diaphragm action is continuous; there are no click stops. This allows precise placement of the through-the-lens metering match needle in the Leicina viewfinder.

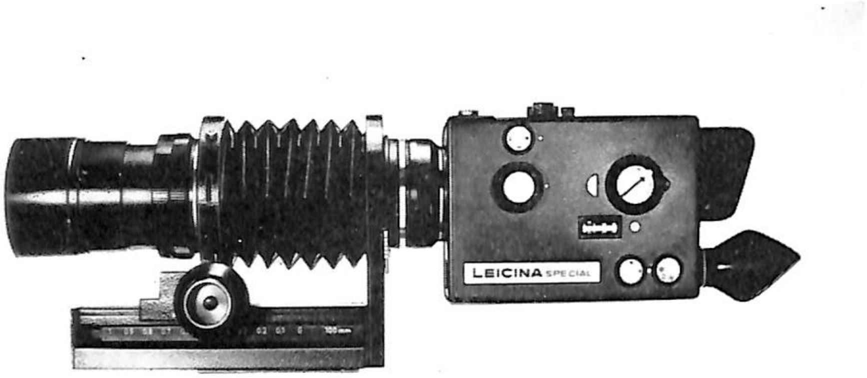
The other lens normally supplied by Leitz for the Leicina is a 6- to 66mm Optivaron f/1.8. This focuses from infinity to so close that the object to be photographed touches the front lens element! It is normally supplied as manually operated, both for zooming and exposure metering. The latter takes place via the match needle located above the finder image. The lens is also available on order in a fully automatic version having motorized "servo" diaphragm operation as well as motorized zoom. Perhaps you've noticed that both the Macro-Cinegon and the Optivaron focus closer than close. But these aren't your only options. Consider using the 60mm Macro Elmar f/2.8 for magnifications up to 1:1, and the 100mm Macro-Elmar f/4 plus Leicaflex Focusing Bellows-R for adaptations involving the Visoflex Bellows II. Consider also that the Leicina Special is easily adaptable for use on a microscope, such as the Leitz Orthoplan, for photomicrography or the Leitz Aristophot stand for macrophotography. And for special medical purposes there is also a Leitz endoscope attachment.

All this talk about close focus brings me to the unique Leicina Special focusing system. For those requiring some diopter adjustment for eyesight, beyond the correction offered by eyeglasses, there is a convenient lever at the finder eyepiece. Its range is a marked +3 to —3. With my heavy eyeglasses I could easily see the entire focusing screen/finder area as well as the exposure-meter needle above it.

For those who wish to depart from normal exposure, please note that plus or minus one stop variations are indicated.

To my delight, I found that, by turning a dial at the left rear of the camera body near the eyepiece, I could dial in an overall microprism focusing screen, a microprism screen with central split-image rangefinder or a clear glass with cross-hair. The rangefinder area is set into the screen at an angle of 45 degrees to make focusing vertical or horizontal lines equally easy. It's the screen to use for speed and accuracy in focusing wide-angle settings of the Optivaron, or the normal-focal-length Macro-Cinegon.

For macro work, I've found the overall microprism focusing screen a pleasure. In this sort of work, the important subject matter does not have to be in the center of the frame for focusing, as is the case with a rangefinder. This is of inestimable help when photographing living subjects. For example, you can't ask a dragonfly to hold still while you twist the camera to center it in the rangefinder and then twist the camera back to position for correct composition. (Horrid as this last sentence sounds, it would be even more



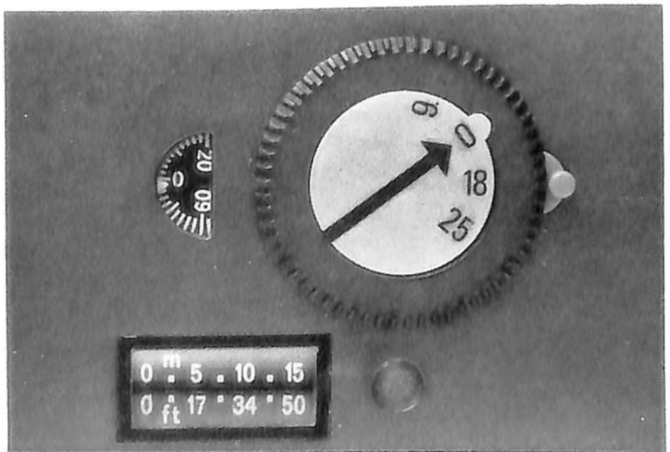
horrid if you had to try this maneuver when the Leicina is tripod-mounted).

The clear glass and crosshair screen will, of course, be useful in cine microscopy, endoscopy or for use with the parallax-focusing method in extreme close-up work.

The positioning of the viewfinder eyepiece at the rear bottom of the camera allows provision of a rubber pad to rest the forehead on while focusing and viewing, and makes for steady hand-held operation.

So far I've concentrated on the optical capabilities of the Leicina Special. Now for the fine mechanical and electronic capabilities of this camera. For example, in addition to a normal silent-filming speed of 18 frames per second, there are also continuous filming speeds of 9, 25 and 54 frames per second. The 25=fps setting is used for sound films, the 54=fps setting for slow motion and the 9=fps for speeding up motion or filming in poor light.

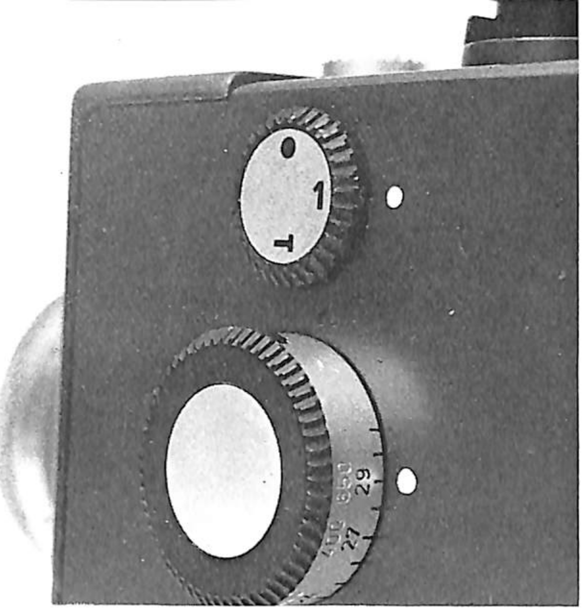
In connection with the latter, be it noted that the film speed keying device incorporated into Super 8 cartridges is not utilized. Instead, the Leicina Special relies on the more positive method of manually setting the ASA or DIN film speed on a dial located at the lower front left of the camera body. ASA values from 8 to 1000 can be set. Thus, if you wish to use the new Ektachrome 160 film for extra low light filming at 9 frames per second, go ahead! The higher film speeds are useful with special emulsions in black and white or color, if and when they become available, or for shooting film in emergencies at inflated Exposure Indexes coupled with special processing.



The slow ASA settings are useful with duplicating-film stocks, (if and when available) or when purposely overexposing black-and-white or color film, coupled with special processing to reduce contrast.

But, back to filming speeds. Note that, to obtain 54 frames per second, you must simultaneously depress either the shutter release button in back of the folding handle or the cable release socket atop the Leicina, and a cable release-socket-equipped milled button at the top front left of the Leicina. The need to depress regular and 54=fps buttons simultaneously helps avoid the risk of accidentally running the Leicina at high speed. Doing this without film in the camera is not recommended. In the Leicina Special you just know that you can't do this accidentally.

By the way, that release button atop the Leicina can be depressed and turned less than 1/4 turn to lock the camera for continuous running. Continuous running may also be effected using a standard locking cable release. In addition to continuous speeds, the Leicina

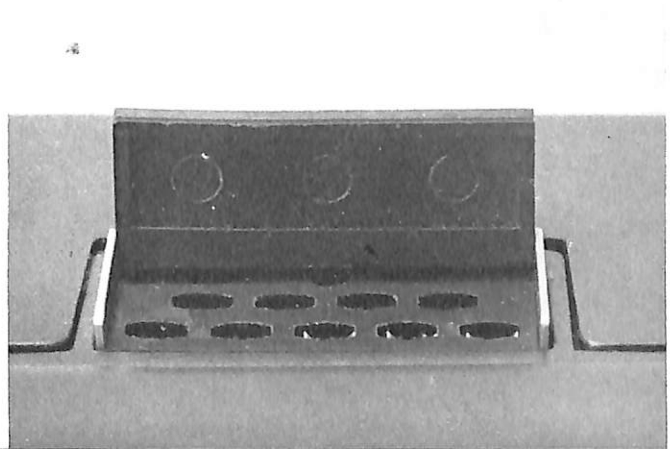


also has a "1" setting for single-frame exposures and a "T" setting for long exposures on each frame. The single-frame setting is, of course, valuable in animation work, time-lapse and other data recording. The "T" setting is for use when the exposure times given by the running-speed settings are not long enough to record an image, (for example, in data recording by extremely dim light).

Naturally, both single-frame and "T" settings can be used for trick effects.

And speaking of trick effects reminds me that depressing a lever on top of the camera, located directly behind the shutter release button, will allow the camera to film approximately 72 frames, and then rewind the film exactly that number of frames to allow making lap dissolves, or double-exposed scenes.

A door atop the Leicina Special, when opened, reveals electrical contacts,contacts at the right front and a series of six contacts under the lens mount. All of these can play a role in performing a series of tasks that are difficult, if not impossible with an ordinary Super 8 movie camera. And, this brings me to an electronic treasure box—the ST1 control unit. Here is a partial list of the things you can do with this device: Use as an external power supply for the Leicina, to extend filming time in remote-control or other extended operations or in cold weather, when the battery housing of the ST1 may be removed and kept warm by body heat. For even more extended filming than is possible with batteries, the ST1 can be used to run the Leicina Special off AC current in conjunction with additional transformer-rectifier. Sound filming with lip-synch in connection with tape recorders such as the Uher Stereo Report 4200 and 4400 and microphone, or of a cassette-type recorder like the Philips Cassette Recorder Type 2209AV is possible. And, finally, lip-synch instructions are also given for tape recorders having a special built-in or attachable separate impulse head. Another function is the making of time-lapse films. These can be for purely utilitarian purposes, such as recording efflorescence, germination, root development, recording traffic density over a time period, assembly of machinery or buildings, surveillance of banks and safes and the like.



The ST1 can also be used to operate the Leicina Special remotely via cable, photocell, radio or the release impulses of electronic instruments. And, finally, each frame shot with the Leicina Special can be exposed via electronic flash. The number of frames within a given period that can be exposed this way will, of course, depend on the recycling time of the flash unit used. For filming at continuous speeds, you may wish to utilize a repeating flash unit or true "strobe".

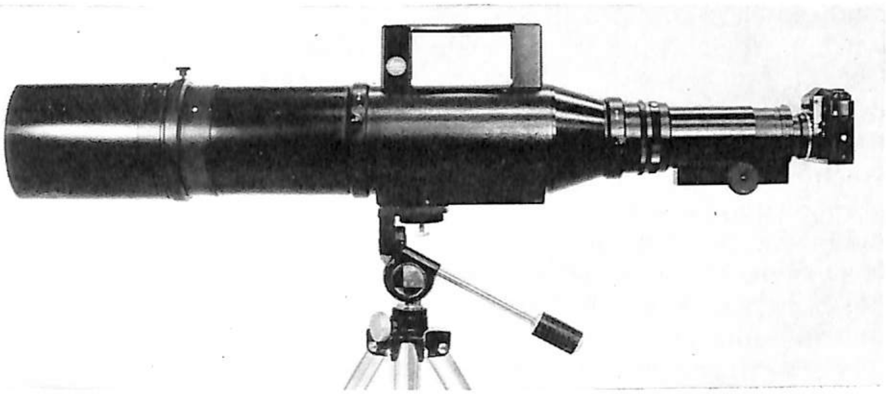
Exposing via electronic flash is valuable for placing a motion-stopping (sharper images) light of high intensity on the subject. The motion-stopping ability will be appreciated in shooting such things as rapidly moving instrument pointers and living subject matter.

To reiterate, the Leicina Special is an integral part of the Leica/Leicaflex system. The ST1 can also be used for a variety of remote control control operations with the motorized Leicaflex SL-Mot.

Amidst all this serious talk, don't forget that the Leicina Special is a fun camera too, capable of bending to your wishes along the lines of creative expression. And that at Leitz there is a staff that has helped to think this out and stands ready to help you put your equipment to the kind of use you wish.

Leicina Special without lens (Cat. #20512)	*$789.00*
Leicina Special with 10mm Macro-Cinegon lens (Cat. #98512)	*$1026.00*
6-66mm Optivaron lens (Cat. #21003)	*$516.00*

New Products



800mm Telyt-S f/6.3

The 800mm lens for the Leicaflex SL which photographer Stan Wayman describes in his article in this issue represents a new breakthrough in lens design. One of the fastest of extremely long focus lenses made, it utilizes a unique new glass developed by Leitz which reduces residual aberration and unsharpness to less than ⅓ of the values for normal optical glass, giving greatly improved contrast, resolution, and color differentiation.

The 800mm lens consists of one three-element group, with a 3 degree angle of field and focusing range of 41′ to infinity. Its smallest aperture is f/32 and its smallest object field 12⅝″ x 18⅞″. A filter slot accommodates series 7 filters. The high-precision sportfinder gunsight aiming device is built into the lens carrying handle. The lens can be supported by a single sturdy tripod coupled to the tripod bushing located at the center of balance, however, an additional ¼″ tripod socket mounted in an auxiliary ring for optical use can be inserted when extra stability is needed. The lens weighs approximately 15 pounds and measures just over 31″ in length and 5.9″ in diameter. A styrofoam lined aluminum carrying case measuring 22″ x 16″ x 7¾″ with molded compartments for a Leicaflex body, the three disassembled lens parts and the auxiliary tripod socket ring is supplied with the lens.

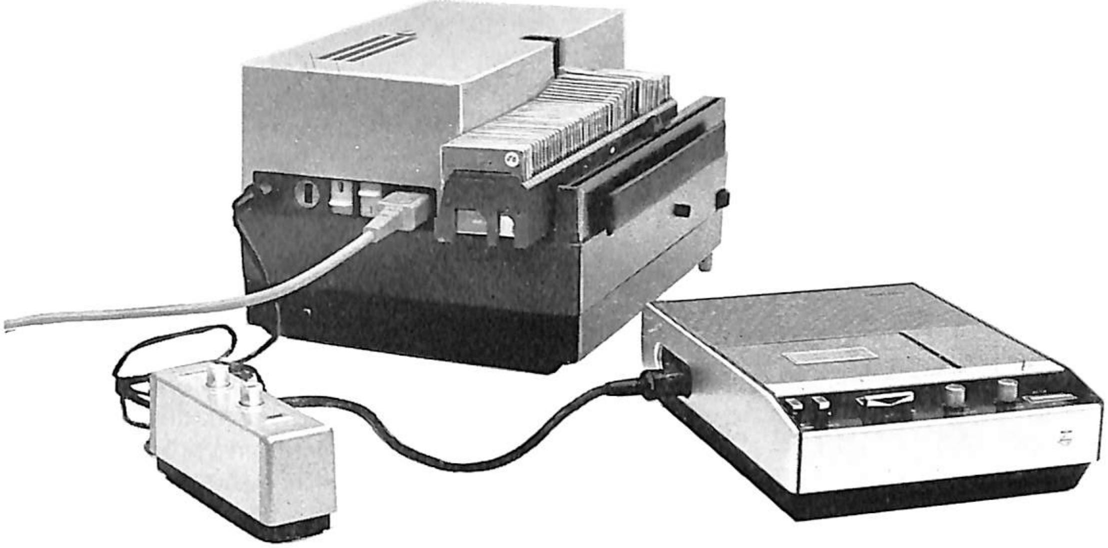
The 800mm Telyt-S with carrying case (Cat. #11921) is priced at $3,980.00.

Professional Camera Bag

A large, handsome camera equipment bag, which was snapped up by professionals when offered to them by Leitz at the 1972 summer Olympics and subsequently at the "photokina," is now available in the U.S. Manufactured for Leitz by the well-known Rox firm of Munich, it is made of top quality black leather, has a shoulder strap and pad, a roomy, reinforced bottom compartment and three outside zipper compartments. The bag. (Cat. #98,279) measures 14″ long, 13″ high, and 7″ wide. The price is $126.00.

Twinmaster Control Unit

You can now use two projectors, show twice as many slides, and not have any annoying "dark period" on the screen. The Twinmaster, manufactured by the Unimark Company of Sweden, is a completely electronic transistor unit made especially for use with two Pradovit Color Projectors. The slides can be shown in tandem on the same screen or on two separate screens but controlled individually from one signal source. The versatile unit enables you to keep one slide on the screen while comparing it with others or to superimpose a text or one slide on another. It can also be used with the Pradovit remote control cable to move the trays backwards and forwards. Simple and efficient to operate, the Twinmaster Control Unit (Cat. #98,762) is now available from franchised Leica dealers. The price is $165.00.



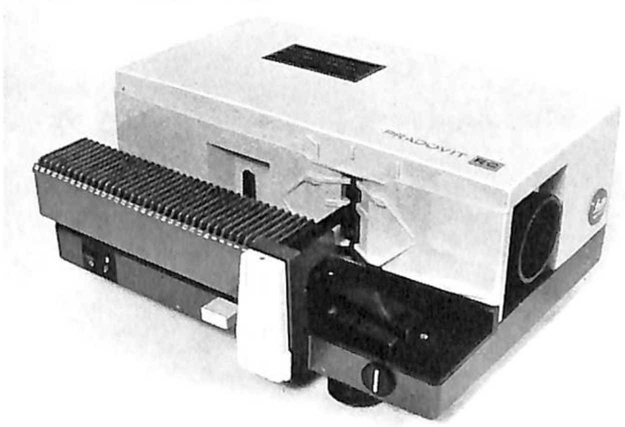
Philips N 2209 AV Cassette Tape Recorder

A high quality, portable monaural cassette recorder and an accompanying slide synchronizer for automatic tape/slide presentations with Pradovit or other remote-control projectors are now available in this country from franchised Leica dealers. Among the many distinguishing features of the cassette recorder, aside from the famous Philips quality, are an impulse head integral with the recorder and an automatic record level circuit. This means that voices further from the microphone will automatically register properly, and those closer to the microphone will not be over-recorded or distorted. A single control has positions for *Play/Record, Fast Forward,* and *Rewind.* An interlocking record button prevents accidental erasure of recorded material, while previously recorded material is automatically erased while recording. Cassettes may be removed or inserted at any time without rewinding. A built-in meter checks the condition of the battery and indicates the recording level. When the accessory LFD 3442 Slide Synchronizer is used, you can record silent slide-changing cues on a separate track of the same band of tape, which on playback will cycle the remote control projector in perfect synchronization with taped music or commentary. Slide changing cues can be put on the tape while recording or may be added, removed and changed later.

The tape recorder uses standard and readily available tape cassettes. It can be used with self-contained batteries or operated on house current without an adapter. Its compact size, 8½ x 6¾ x 2¼, makes it ideal for use in the field. Complete with microphone, carrying case, patch cord, and 60 minute tape cassette (Cat. #98,750), the price of the tape recorder is $114.00. The Philips LFD 3442 Slide Synchronizer (Cat. #98,751) costs $34.50.

Pradovit RC

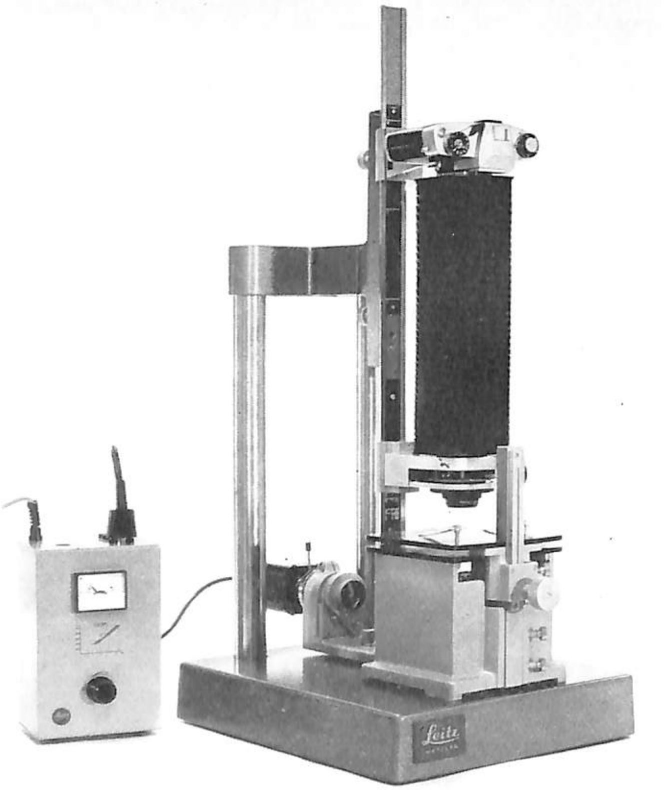
Introduced by Leitz at the 1972 "photokina," the Pradovit RC, although low-priced, features a remote control unit complete with arrow pointer, and the same outstanding optical performance of the Pradovit projector series. In addition to the standard 90mm Colorplan f/2.5 and 85mm Elmaron f/2.8 lenses, the Pradovit RC can be used with the 50mm Elmaron f/2.8 for wide-screen projection or with the 150mm Elmaron f/2.8 for an extra-long throw. The Pradovit RC comes with a durable plastic carrying case and can be used with either 36- or 50-slide magazines. Pradovit RC with 90mm Colorplan lens (Cat. #30,184) is $223.50; with 85mm Elmaron lens (Cat. #30,183) it is $198.00.



EISA– A New Name at Leitz

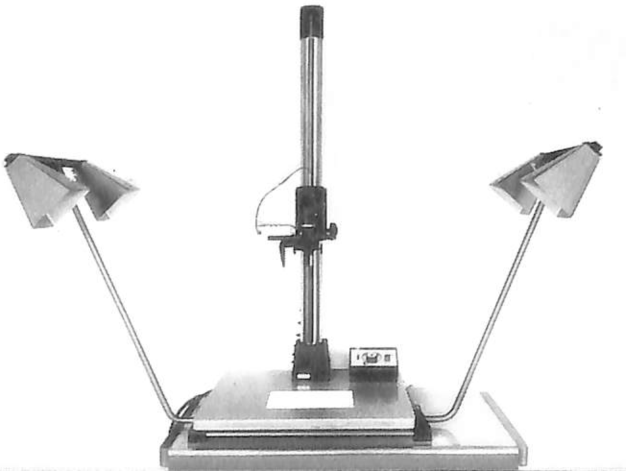
In 1974 Leitz will celebrate its fiftieth year of service to the photographic community and its one hundred twenty-sixth year of service to the scientific community. Throughout this time, Leitz products have enjoyed an enviable reputation in their fields. The Leitz microscope line has traditionally led the field with new developments and products. Leica, another Leitz product has virtually set the standard in the field of 35mm photography since it invented the concept in 1924.

It seems only natural that a company with leading technologies in the fields of science and photography is also best qualified to combine these technologies for the benefit of mankind. As an example, photography through a microscope is covered in the new product line. The name of this new technology and product line reflects its scope—Educational, Industrial, Scientific and Audio-Visual products (EISA).

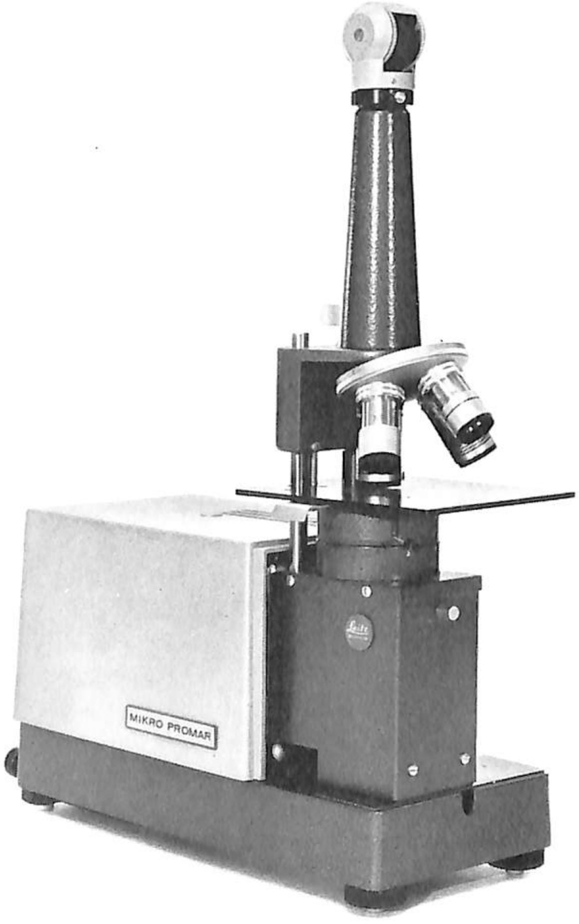


Aristophot stand, with Macro-Dia illumination for photomacrography with the Leicaflex and long bellows.

Reprovit 11a Universal Copy Camera.



Milro-Promar projector for projecting specimens from single cells to large histological sections.



Selection of those products best suited for this new field from the broad Leitz photographic and scientific lines was not a difficult assignment. The real difficulty comes in developing a marketing team to make these products available to those customers who need this type of assistance. And, since the technology is new, Leitz must also provide its EISA customers with complete training in this new technology. To accomplish this, a select network of dealers throughout the United States was offered the EISA product line and specialists at each dealership were required to attend a comprehensive training school on EISA technology at the Leitz headquarters in Rockleigh. This special EISA school will be continued in Rockleigh as long as the need for dealer training exists, and of course, a staff of experts at Rockleigh is available for consultation at any time.

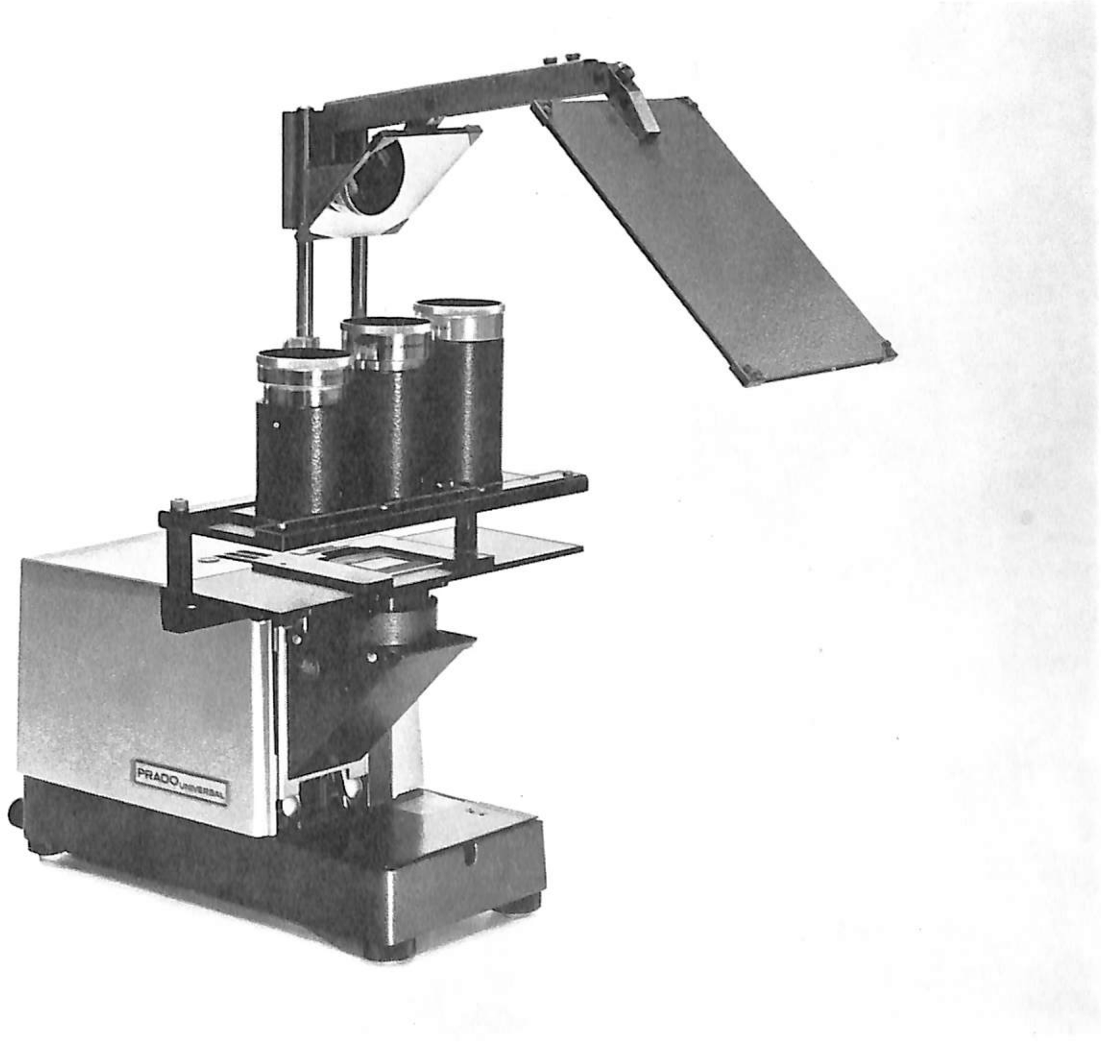
At this writing, the EISA franchise and product line are a reality. The program is well underway and has been met with a great deal of acceptance by our customers. The EISA line will continue to be expanded as new products are developed. Some of the products presently available from EISA franchise dealers include:

1. Microscope and photomicrography attachments and related products.
2. Microfilming and slide duplicating equipment.
3. Specialized projection equipment.
4. Close-up and photomacrography equipment.

Those interested in learning more about the EISA product line can obtain complete information on any of the categories above, or all of them, as well as a listing of authorized EISA franchise dealers by contacting:

Karl PM Kleinen
E. LEITZ, INC.
Rockleigh, New Jersey 07647
(201) 767-1100

The Marko-Promar projector is a low magnification projector for wall or bench projection of large sections, cultures, etc. It is also very useful for medical illustration.



Leitz

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Pictures that are as big as life.
Or pictures that are as small as life, depending
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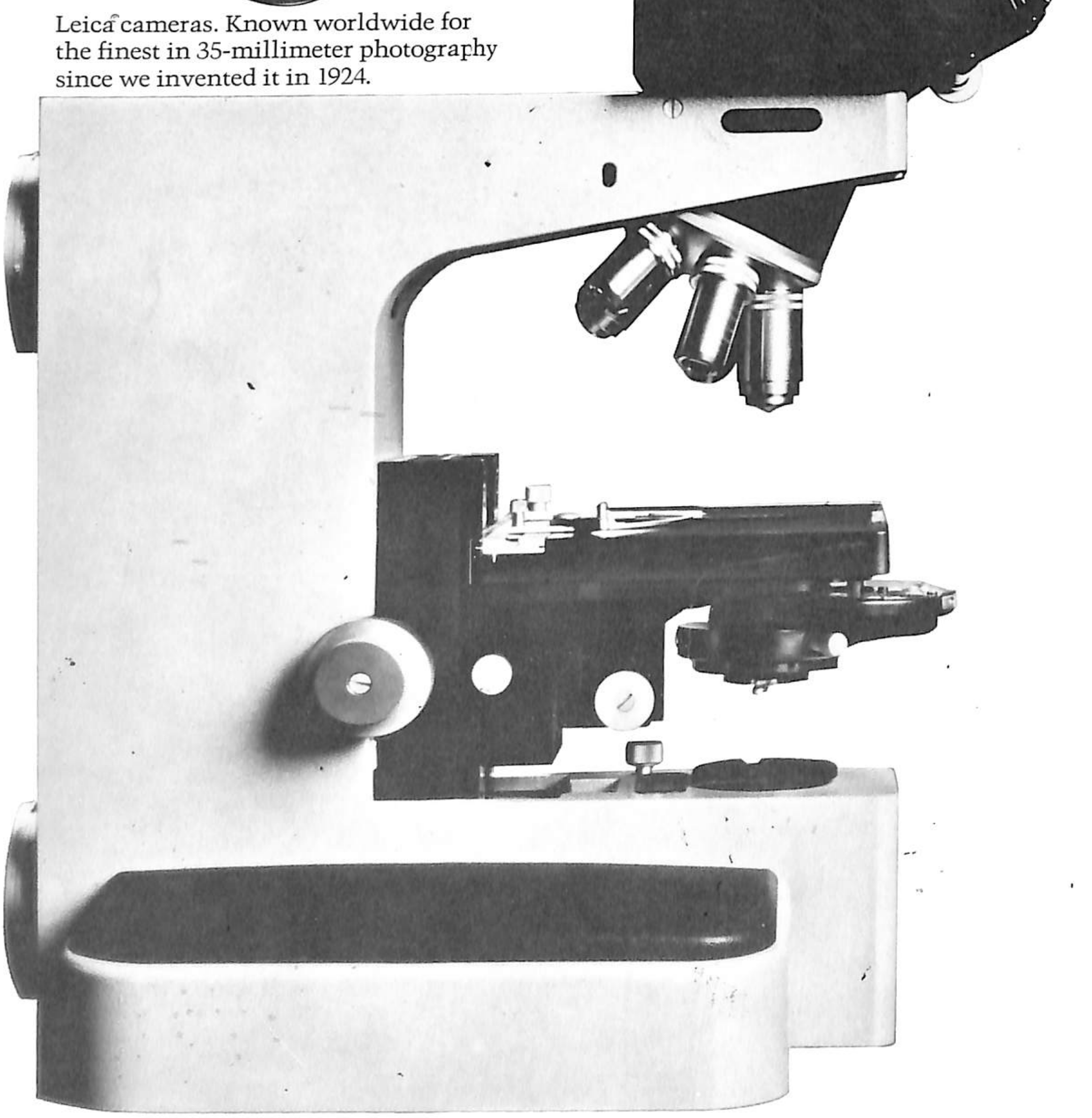

Leitz® microscopes. Known by scientists everywhere for continually setting new standards in the world of microscopy.

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